



Published by
E. HARRISON CAWKER. Vol. 23, No. 6.

MILWAUKEE, OCTOBER, 1887.

TERMS: \$1.00 a Year in Advance
Single Copies, 10 Cents.

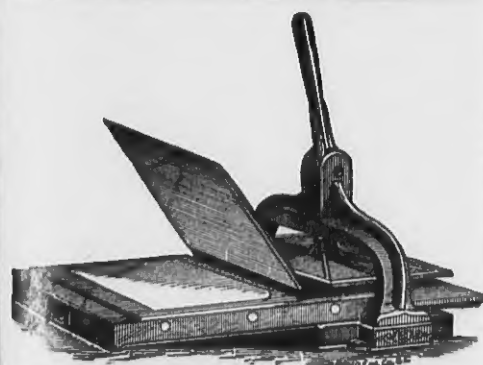
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MINNEAPOLIS.

"GOLD SEAL" RUBBER BELTING,
OAK TANNED LEATHER BELTING.

Are you alive to the importance of handling the best goods that the market affords? In this day and generation good goods are coming rapidly to the front while the inferior goods are being relegated to the rear. Note the fact that the intelligent consumers of this country are inquiring more carefully into the quality of goods offered them and are beginning to realize that they cannot afford to use cheap goods even at low prices. In this connection we urge your examination of the specialties that we make and sell, as we believe them to excel all others in strength, durability, quality and finish. We sell them at such favorable prices that it is manifestly to your interest to handle them.

Yours Truly,

THORNBURGH & GLESSNER, Chicago.

THE UNITED STATES MILLER.

The Garden City Wheat Cleaning Process!

RESULTS IMPROVED IN ANY LONG SYSTEM MILL.
INDISPENSABLE FOR THE SHORT SYSTEM.

◀HAS STOOD THE TEST FOR YEARS, AND NEVER FAILED.▶

MILLERS

We wish to say a few words in regard to WHEAT CLEANING, and to ask you whether our views are not correct. With the exception of some few cranks, who cannot be convinced, until it tells on their bank account, NO ONE DOUBTS the existence of a certain amount of dirt in the crease of the berry. Nature put it there, and there it is, and you can call it by any name you choose. It is a self-evident fact, that unless this dirt is removed, it must be incorporated with the flour, and to incorporate it, is to lower the grade. The BEST SCOURER or even DECORTICATOR, will not do more than to clean the exterior of the grain, and hence the removal of this crease dirt, requires a different method of treatment.

WE OFFER THIS METHOD IN OUR PATENTED PROCESS.

FIRST, thoroughly clean your wheat. Get it as clean as the latest and best machinery can do it. SECOND, SPLIT THE CLEANED WHEAT, AND THEN SCOUR AND BRUSH THE HALF KERNELS. You are then in a condition to proceed with your flouring operations, and by no other method can you get as good results.

NOW GENTLEMEN, consider that this **PROCESS** has been in successful operation for the last five years, and has been thoroughly tested in hundreds of mills in this country and abroad. IT HAS NEVER FAILED TO IMPROVE THE GRADE OF FLOUR IN ANY MILL WHERE IT HAS BEEN ADOPTED. **LONG SYSTEM MILLS, SHORT SYSTEM MILLS, BURR MILLS** have all been benefited. You need this Process and cannot afford to do without it, as we can convince you.

We offer you to carry it out. **THE GARDEN CITY BREAK MACHINE AND BRUSH SCALPER**, and will guarantee the work. If you are now making a good FIRST BREAK, then the BRUSH SCALPER alone is what you want.

DO NOT HESITATE, but write for prices, etc.

Garden City Mill Furnishing Co., Chicago, Ill.

WE MANUFACTURE A FULL LINE OF WHEAT CLEANING MACHINERY THAT CANNOT BE EQUALED.

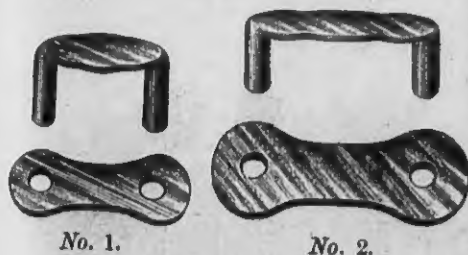
The United States Miller

Published by E. HARRISON CAWKER. Vol. 23, No. 6. MILWAUKEE, OCTOBER, 1887.

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THE SMITH PATENT BELT FASTENER.

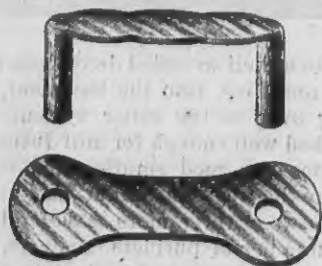
What, another new belt fastener? No, not exactly a new belt fastener, but probably new to many readers of THE UNITED STATES MILLER, and we will, therefore be able to pose before the dusty fraternity as a benefactor for introducing this fastener to the patrons of this journal. We feel that we are doing them a great service, for which they and their descendants will rise up and call us blessed.



No. 1.

No. 2.

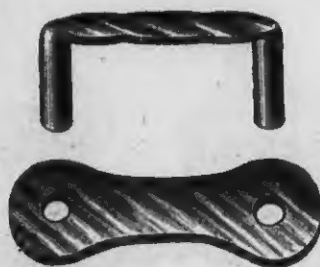
The Smith belt fastener has been upon the market about four years, sufficiently long to enable those who have used it to be able to speak of its merits, and they who have tried it speak aloud in one voice and unstintingly in its praise. The publisher of this journal when recently in the office of the enterprising agents, Messrs. Thornburgh & Glessner, at Chicago, was shown letters from all quarters of the civilized globe bearing witness to the excellence of this little contrivance. A little thing it is, but capable of doing an immense amount of good in this world of care and trouble, for here is a cure-all for nearly if not quite all of the annoyance in mills and fac-



No. 3.

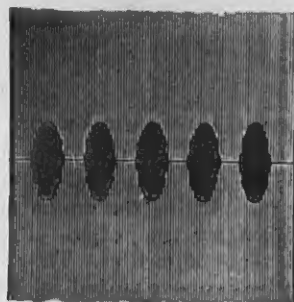
ories occasioned by a poorly laced or fastened belt. Here is a peculiarly made copper rivet of the shape shown in the cut, and provided with a copper washer made to correspond, and the method of application is so simple and easy that a word explains it. A hole is punched by the punch provided for the purpose, the rivet or fastener is put through the two holes, the washer is placed in place in position and the rivet ends ham-

mered down. The result is a perfect fastener warranted to last as long as the belt lasts. It passes smoothly over the pulleys, causing no jar as the backs of the fasteners are nearly flush with the surface of the belt. Longer

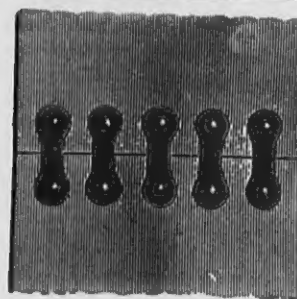


No. 4.

life to the belt and a steadier power is thus guaranteed, and the saving in time and trouble in a mill or factory equipped with these fasteners will amount to many dollars every year, while the cost of the fasteners used in the time is hardly worth mentioning, as one box will fasten from twenty to thirty belts. If power users only could be induced to keep a record of the number of hours consumed by their help in lacing belts and would notice the loss of power occasioned by poorly laced belts, they would be astonished at the result. Not one man in a hundred can properly lace a belt and even that one man will often ruin a belt or shorten its life by carelessness in lacing and the belting bill is thus increased.



With the merits of the Smith belt fastener once known among power users less complaint will be heard of poor belts. The belt is often more sinned against than sinning, to use an old expression. For the information of the public at large, we call attention to the fact that a separate size is made for each kind of belt. No. 4, as shown herewith, is intended entirely for leather belts, No. 3 for rubber belts, No. 2 for cotton belts and No. 1 large drive belts to run over very large pulleys. Extra long rivets are furnished when double belts are used. The cuts show also



the appearance of a belt fastened with this fastener. It is a matter of congratulation to the trade that the agency of this contrivance is in the hands of so well known a firm as Thornburgh & Glessner, of Chicago. The very fact that this firm is pushing their sale means that the article will soon stand at the head. They would not lend their name and reputation to any article that did not possess genuine merit. A descriptive circular of this fastener can be had by addressing Messrs. Thornburgh & Glessner, at 12 to 16 North Clinton street, Chicago.

PLEASANT PARAGRAPHS.

OXBERIENCE vas a bully deacher. Der only trouble mit him vas dot he gifs his knowledge out when it vas pooty late.—*New Age*.

MOSES and Isaac Rabbenstein were sitting in the back part of Isaac's store talking, when there came a jar to the building. "Mein Gott, Itzig," exclaimed Moses, rising in terror, "led us get oud." "Pe kvied, Moses; vat's der madder wid you?" said Isaac, angrily. "Vy. Itzig, dat var an erdkvuag." "Erdkvuag noddings! Dat vas only Shakey ubstairs dropping der bries on summer cloding."—*Tid-Bits*.

"CHARLES, I want to ask you to do something for my sake," said young Mrs. Tocker. "You know you are very dear to me, and I am always afraid something is going to happen to you. I saw in the newspaper that some men take their soda water with a stick in it. I'm sure I don't see how that makes it any better, but I do hope that if you take yours that way, you'll be careful not to swallow the stick. It would be sure to choke you to death. You'll be careful, won't you, Charlie?"—*Merchant Traveler*.

CLERGYMAN (to inebriate)—"My dear sir; you drink schnapps as if it was water."

Inebriate—"Alas! you have too good an opinion of me. I'm so out of practice at drinking water that it will be a long time before I can swig it down as if it were schnapps."—*Texas Siftings*.

LOUIS GATHMANN'S NEW OBSERVATORY.

Many of our readers who delight in looking around them and contemplating the works and mysteries of nature, have no doubt looked up to the stars and lost themselves in a variety of reflections. Others, perhaps, even take a great interest in astronomy, and for these the accompanying illustration will be of special interest. We say *special* interest, because even if there should be a miller who did not care enough about astronomy to go one step to find out whether or not the man in the moon was alive, he will feel interested when we shall explain further on what connection there is between the subject of this sketch and milling, beyond the fact that it is the property of a mill-furnisher.

of wheat and samples of mill products of every kind. Every miller who has looked at these objects through even a small glass only knows how plain a story the latter will tell in many cases, which would remain in the dark when searched after by the naked eye. What wonder if Mr. Gathmann received many valuable suggestions from his powerful magnifying glass when examining samples of flour, in order to determine the nature of the impurities present. It was through observations made in this manner that he was enabled to tell the fuzz and beard and bran and other impurities from the flour particles to such a nicety as to suggest the manner of cleaning wheat as advocated by him ever since. His microscopic studies further disclosed the nature of the black streak which is seen on splitting a

FROM LOUIS GATHMANN.

Editor of United States Miller:

At your request I herewith write you a few lines for your readers and thinking millers. I hope that my writing will please you, as you were aware that in giving my opinion I go the straight road, without "giving taffy" to anybody.

As I have said before this, I am satisfied that milling to-day is but little better understood than in years past, a great many millers apparently being unaware even at this late day, that it takes good healthy and strong wheat to make good flour from. Little progress has been made in this direction during the last twenty-five years, and scarcely has more progress been made in the wheat-cleaning department. A number of cases have come to my knowledge where millers



LOUIS GATHMANN'S NEW OBSERVATORY.

We cannot here go into the details of the building, and will only say that to the house, as many of our readers will remember it, has recently been added the large tower, serving for the purpose of an observatory. The tower is about ninety feet high and fitted out with the various instruments used for astronomical observations.

Now, as to the relation between this observatory and milling. From the study of astronomy, which Mr. Gathmann undertook simply for his recreation; and from observations through the large telescope, developed a taste for optical observations of a different kind, and so, from the telescope to the microscope was but one step in this case. When he took up the study of the secrets that are revealed by a powerful magnifying glass, it was, of course, the most natural thing in the world for a mill-furnisher to explore the grain

grain of wheat through the seam, and this ultimately resulted in the invention of the machinery for splitting the grains and then scouring them, for the purpose of removing these black seam impurities. The ever present impurities as above named in discolored flour were made apparent by the microscope, and thus it happened that Mr. Gathmann, from examining all the products of a mill, was convinced that nothing short of complete removal of all foreign matter from the wheat grains before grinding would admit of the production of clear flour, as these impurities could certainly not be present from the beginning to the end of the reductions, if they had been removed before the grinding. Mr. Gathmann has often said, and evidently with good reason, that a rule is no more indispensable to a carpenter than a microscope to a miller.

have thrown their so-called decorticators and ending stones out into the basement, since changing over to the roller system. The idea worked well enough for mill furnishes, as in place of a good smutter and scourer (which, by the way, the miller had paid for long ago) two or three more sets of rolls, besides a number of purifiers, scalpings, bolts and centrifugals if possible, had to be put in, in order to remove the impurities in a more highly scientific manner, and at an excellent profit for the mill furnishes. This, when seen through the spectacles of our modern mill-builders, looked like real progress. In fact, however, "an ounce of prevention is better than a pound of cure," and in regard to this old saying, the smutter is the prevention, and the other numerous machines in place are the cure.

New we come to the second part. Many millers have asked themselves the question: Is it really of much benefit, to clean the half kernels after the first break? And in answering this question, no doubt many have thought that if there was much in it, all our large millers would have already adopted it. They seem to forget that it was over two dozen years before our most wide-awake flour millers adopted the rolls after many roller mills had been in full blast. During all this time they hardly thought enough of rolls to even investigate into their merits, although our flour came in direct competition with the European full roller mills, and even after hundreds of millers adopted them, there were thousands who would not have them as a gift. The purifier met the same fate. It took many years before it was universally adopted, and a quarter of a century passed before it was evident to all first-class millers that the purification of some middlings was an absolute necessity for obtaining first-class results. Also in this case hundreds of millers for a long time would not have used a purifier if they could have had them free of charge. Why then should there not be millers for a long time trying to get along without a first break and a machine for cleaning the split wheat? But they will all come to it, just as sure as they did in the above-mentioned cases, as a clear, high grade of flour will always be demanded; and the miller who will produce it must keep in line with the improvements, in spite of the arguments of interested parties against it. As I said years ago, for the sake of comparison, if a cook wants to prepare good mashed potatoes, the first step is to secure good material, and to remove all impurities, even to cutting the potatoes open to remove everything unsound in the core. Then there is the clean stock to prepare the clean meal from. It matters little then, whether a two, three or four-tined fork of silver or steel is used for the mashing. All this appears to be a matter of course, and yet, from the methods of first grinding and pulverizing into thousands of particles, and then endeavoring to remove the impurities, it would seem as if some millers were very slow to recognize the common sense method in the above described proceeding.

If we could only forget our prejudiced notions about milling for a time, we would see at once that to make good flour we need good wheat in the first place, then a proper and thorough system of cleaning it, then the proper machines for grinding and a sensible miller, who knows when his offal is clean, and how to produce as uniform a grade of flour as the location or demand may call for.

In regard to a good miller, I will say a few more words. A great many mill owners make a great mistake in this respect. They fix up their mills as perfectly as their means will allow, or even as perfectly as they know how, and then have an incompetent man to run it. A good miller is cheap at any reasonable price, while a poor one is dear at any price. Success in this case depends in a great measure on getting a good man and paying him good wages. I have found it the best plan in our business to always get the best mechanics to be had, and pay them good wages; they are by far the cheapest in the end. It is well known that in this city the Garden City Mill Furnishing Company are

paying their men the highest wages. I mention this to show that I practice what I preach.

Another thing I will mention is that I have found the best school for millers in small and medium-sized mills. This class of mills gives the best chance for men who wish to learn milling throughout, the adjustment of rolls as well as the cleaning, bolting and purifying departments. Not only do these mills afford a better chance to learn all this more thoroughly, but also in much less time than in large mills. For the same reason it may be said that as a whole, better milling is done in small than in the larger mills.

Yours truly, LOUIS GATHMANN.
CHICAGO, Oct. 1887.

NEW PUBLICATIONS.

St. Nicholas for October opens with a delightful story entitled "An Ivy Spray," by Miss Alcott; Frank R. Stockton writes of "The Low Countries and the Rhine;" Gen. Badeau of "Grant at Vicksburg," and W. H. Rideing of "The Boyhood of John Greenleaf Whittier." There are numerous stories, sketches and poems by popular writers, and the illustrations are profuse and excellent.

The American Magazine for October contains five illustrated articles including a description of an ascent of Popocatepetl, by A. H. Noll; "A Pot-Hunter's Paradise," by C. L. Norton; "American Experience in China," by C. B. Adams, portraying the crowded life of Peking and the vicinity; and an account of the building of the Washington monument, by Oscar Foote. A number of other papers, including one by Grant Allen, stories and poems make up an attractive and valuable mass of reading. Among the poems is the striking one by Maurice Thompson, "Rebel or Loyalist." Published by The American Magazine Co., 749 Broadway, New York.

The October *Century* opens with an illustrated article by Mrs. Van Rensselaer on "Ely Cathedral." The chapter of the history of Abraham Lincoln gives a sketch of the secession movement directly following the election of 1860, and throws some new light on the details of the conspiracy to destroy the Union while presenting a vivid picture of Mr. Buchanan's weakness and vacillation. It is a chapter that should be carefully read by those who wish to understand one of the most important passages in American history. "Twelve Years of British Song," by E. C. Stedman, is a capital literary paper on recent English poetry. The war articles include a paper by Capt. Daniel Oakley on Sherman's March through Georgia and the Carolinas, and "Sherman's March from Savannah to Bentonville," by Gen. Slocum, profusely illustrated. The poetry of the number is by Helen Gray Cone, Louise Imogen Guiney, Robert Burns Wilson etc.

The October number of *Scribner's Magazine* will be an unwelcome one to a large class of its readers, in that it contains the last of the Thackeray letters, which they have been reading with so much pleasure. It will be welcome, however, to another class, who like good short stories, of which they will find two here, "The Mortgage on Jeffy," by the lady who writes over the pen-name of Octave Thanet, and who has no superior in the line of pathetic provincial life and manners, and

"The Village of Viger," by Mr. Duncan Campbell Scott, who has a natural and charming vein of phantasy. There are two papers appropos to phases of French art and manners, one by Mr. Henry G. Avery on "The Paris School of Fine Arts," of which examples are given. The other by Mr. W. C. Brownell, who, in a consideration of French traits discusses the sense and sentiments of the Gallic nation. The serial of "Seth's Brother's Wife," by Mr. Harold Frederic, is continued, and the Japanese novelette of Mr. E. H. House, "The Sacred Flame of Torin Ji," is finished. The solid papers are an illustrated one on "Caverns and Cave Life," by Prof. N. S. Shaler; another on "Municipal Government," by Mr. Gamaliel Bradford, and a third on "The Bucolic Dialect of the Plains," by Mr. Louis Swinburne. The verse is by H. C. Bunner, Elgot Weld, Charles Edwin Markham and Graham R. Tomson on "An Unbidden Guest."

The *Illustrated London News* in its American edition of October 15th furnishes as usual many pictures upon a variety of subjects, including a double-page picture "Deer Stalking in the Highlands," three pages devoted to the British Mission to Morocco, a most pleasing and instructive picture entitled "A S. d. Dog's Day," sketches of life on board a man-of-war, the home of Florence Nightingale, &c., &c. The supply of reading matter is also abundant and interesting, while the number complete costs at retail only 10 cents. The office of publication is 237 Potter building, New York.

ITEMS OF INTEREST.

THAT the barley crop in California this year is large is evinced by the heavy receipts, over a million centals or 50,000 tons having arrived from July 1st to date. Threshers report that in some localities the yield was full 100 per cent. greater than the growers had anticipated. In a single day as much as 2,000 tons have arrived at this port within the past few weeks. Some who have grown gray in the grain trade assert that they have no recollection of barley coming in so rapidly in any former season. This is corroborated by statistics, which show that, while in some former years, notably the one immediately preceding, there was some similarity to the present season, in no previous year was the aggregate of receipts so large from July to September inclusive. In the first quarter of the cereal year of 1886-7 the barley receipts were 905,000 centals, but with this exception, they never exceeded 700,000 centals for corresponding time, and in only three years, viz., 1876, 1879 and 1883, was the aggregate of 700,000 centals attained in receipts from July 1st to October 1st.—*San Francisco Grocer*, Oct. 14.

A 12 INCH screw having a pitch of 4 in, turning in a trough with a clearance of 1 in, and revolving with a speed of maximum effect, 60 turns per minute, discharged 6½ tons of grain per hour, expending .04 horse-power per foot run. The sectional area of the grain moved was 49 per cent. of that of the screw. At speed above 60 turns per minute the grain did not advance, but revolved with the screw. An endless band 28 in wide, traveling about 9 ft per second, delivered 70 tons of grain per hour; power expended, 014 horse-power per foot run.

UNITED STATES MILLER.

E. HARRISON CAWKER, EDITOR.

PUBLISHED MONTHLY.

OFFICE, NO. 124 GRAND AVENUE, MILWAUKEE.

SUBSCRIPTION PRICE—PER YEAR, IN ADVANCE.

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 To Canadian subscribers, postage prepaid..... 1.00
 Foreign subscriptions..... 1.25
 All Drafts and Post-Office Money Orders must be made payable to E. Harrison Cawker.
 Bills for advertising will be sent monthly, unless otherwise agreed upon.
 For estimates for advertising, address the UNITED STATES MILLER.

[Entered at the Post Office at Milwaukee, Wis., as mail matter of the second-class.]

MILWAUKEE, OCTOBER, 1887.

We respectfully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in the UNITED STATES MILLER. You will thereby oblige not only this paper, but the advertisers.

EASTERN mill-furnishing establishments report business unusually good.

THE Kansas Millers' Association has 55 members representing 12,000 bbls. daily capacity.

ST. CLOUD, Minn., citizens claim that their city is to rival Minneapolis as a milling centre in a few years.

It now seems highly probable that Switzerland will soon have a patent law similar to that in force in other countries.

WAS it, or wasn't it a straight square deal on the Chicago market that broke you? Don't you think you'd like to know?

No more stoves will be used in railroad cars in the state of New York after May 1, 1888.

THE import of wheat-flour from the United States into Amsterdam, Holland, during the year 1886 amounted to 1,087,140 barrels.

FRENCH millers recently held their first National Convention for the purpose of discussing all matters affecting the French milling trade.

No quorum being present at the meeting of the Northern Indiana Millers' Association, advertised, those present adjourned to a later date.

EXTRAVAGANT claims are being made as to the great value of G. Luther's middlings purifier, manufactured at Brunswick, Germany. It has been patented in nearly all countries.

H. W. CALDWELL is furnishing W. J. Meeks elevators with Caldwell's Automatic Grain Shovels (a new article of manufacture) and a large quantity of Caldwell's Conveyors.

Now is the time for millers to mend their broken windows, and close up all unnecessary openings in their mills. Timely action will save wood and coal and add to the

comfort of employes. It is true economy to keep the mill comfortable in the winter.

THE *Oesterreichische Revue* says that the deaths upon the whole earth are calculated at sixty-seven per minute, 97,790 per day, 35,639,835 per year. The births according to the calculation are seventy per minute, 100,800 per day and 36,792,000 per year.

WHEAT being unusually dry this year, wheat-heaters will be in good demand. The action of the heater is to draw the moisture from the interior of the berry to the surface, thus toughening the bran and making its removal in large flakes easy.

FLOUR mill and elevator owners are respectfully requested to send us as soon as possible full answers to the questions propounded on page 92. The necessary blank will be found there. If there is not sufficient room on blank write us a separate letter. It is to the interest of the entire trade to have this work carefully done.

In a recent circular from Harris Bros. & Co., 6 Crosby Square, London, we note the following: "Flour from abroad is a shade too plentiful, especially home millers are now making so good and cheap a sack, most bakers calling out for a better run of 'straight' Americans, with not so much 'patents' taken out, or they must go more on home-made!"

OREGON flour will hereafter be shipped to China via the Canadian Pacific Railway's new line of steamers from Portland to Port Moody and thence direct to Hong Kong, China.—Seven hundred and seventy-four bushels of wheat were raised on a 17-acre field of the Missouri Agricultural College Farm this year.—W. J. Clark & Co., of Salem, O., announce that certain parties are infringing their patent on elevator buckets.

REV. T. DE WITT TALMAGE recently preached a whole sermon on life insurance. He strongly urged his hearers to invest in insurance. It will now be in order for life insurance companies throughout the country to send the reverend gentleman a paid-up policy in payment for the advertisement so gracefully given.

A PHILADELPHIA lawyer, suspecting his client of being an imposter, turned detective, proved his suspicions correct, and then went into court and withdrew from the case, after handing the client over to justice. Verily, that lawyer was the big r scoundrel of the two.

THEY do say that there is to be a stampede among some of the leading Western millers to "THE Soo." Well, why not? If "THE Soo" suits millers better than some other points just let them stampede. There is plenty of water power there with fair shipping facilities, which our Minneapolis friends know full well.

THE Shields & Brown Co., 78 and 80 Lake street, Chicago, manufacturers of sectional pipe coverings, report business with them as very active. They have lately shipped a large bill of covering to a Western Railroad Company, and have closed several large city

contracts in Chicago. Beside which, orders for their well-known goods are now pouring in on them from all directions to such an extent that their factory is heavy taxed to keep up with the demand for their various styles of covering.

Their Eastern house at 148 Worth street, New York, is also enjoying a very active trade.

BROWN bread and Graham bread have long been praised by people of delicate appetites, but we will stake a considerable sum on the question of these persons resuming their praise of this sort of food after investigating the manufacture and baking of this material.

AMONG the laboring men of the new Congress is Senator Blodgett, of New Jersey, who began life as an apprentice in the Amoskeag Engine Works; Congressman Nichols, of North Carolina, who served six years as an apprentice in a printing office; Henry Smith, of Milwaukee, who is a millwright, and J. B. White, of Indiana, who was a calico printer in Scotland, and has been a tailor for many years in this country, but is now a manufacturer of carriage wheels.

J. R. DODGE, statistician of the United States Department of Agriculture, concludes his latest report as follows: "The product of the world promises to be quite as much as for each of the two preceding harvests. Present indications do not promise material increase of prices; they certainly do not demand lower prices." The report further shows a great falling off in the imports of wheat into the United Kingdom from Russia and India.

THE largest day's clearances of flour on record were made from New York Oct 20, namely 47,980 sacks and 10,220 bbls, or equal to over 62,000 sacks. This was said by the older flour men to be the largest exports of flour ever made in one day in the history of the trade. This is not a spasmodic activity either, as the exports of flour have been increasing almost as rapidly as those of wheat are decreasing.

THE Milwaukee Water Works now in use have a daily capacity of 23,000,000 gallons, and another engine with a daily capacity of 20,000,000 gallons is to be purchased as soon as the Legislature authorizes bonds to be issued for the purpose.

THE advantages of electricity over other means of illumination in reducing the fire hazard in mills, are noticed in the following paragraph taken from *Modern Light and Heat*:

Fire underwriters all over the country are now, it is interesting to know, strongly recommending and advocating the introduction of incandescent lights in factories where explosive dust is produced or inflammable fabrics are made. What is of further interest in this connection is the fact that mill owners and others are beginning to realize the superior advantages of illumination by electricity, not only in the better physical condition of the operatives, but also in the greatly decreased fire risk.

THE inference to be drawn from the official reports indicate that there is a small deficiency in the world's wheat crop.

J. L. STYNE, one of the brightest millers in this country died recently. He was a member of the firm of Dierks, Jenvey & Co., Harmer, O. He read a very interesting and valuable paper before the May convention of the Millers' National Association, in St. Louis.

THE grain dealers of Stockton Cal., organized a Merchants' Exchange and Call Board and elected a board of seven directors, with J. D. Peters as president. They will petition the San Francisco produce exchange to place Stockton warehouses on the list of the call board. The exchange will hold daily sessions.

MR. E. H. WALKER, for many years Statistician of the New York Produce Exchange, has joined the editorial staff of *Bradstreet's* the well-known commercial and financial paper published in New York, to which he will give his exclusive services. Mr. Walker is perhaps the best informed man in the country on the statistics of grain, flour, provisions and kindred lines. He is the author of the only complete records of this kind in the country, and the inventor of the "visible" grain supply statement. With his aid, in addition to the original work in that direction which *Bradstreet's* has done and has projected, that journal must become indispensable to all interested in those subjects.

WOULDN'T you like to know what has the harvest been? Oh! Wouldn't you like to know?

Is there a shortage of wheat on the world's crop?

Wouldn't you like to know?

WHERE are the profits on your last year's work?

Wouldn't you like to know?

WE recently met an old Milwaukee man who emigrated to Woonsocket, Dak., about three years ago, and naturally asked him about the country, how he liked the climate, how the crops were in his section, etc., to all of which he replied in terms most complimentary to his adopted territory. We queried further: Will trees grow well there? "Well, I should say they would," he answered. "Anything under Heaven grows luxuriously there that is a blessing to the human race. Why, just look at my head," said he, removing his hat. "When I left Milwaukee my head was as bald and shiny as a billiard ball and now just look at it. Can you show me a man in Milwaukee, young or old, that's got a better head of hair?" The hair was there and no mistake. It might be well for the bald-headed gentry to desert the front row in the theaters for awhile and take to the fertile prairies of Dakota.

IMMENSE FLOUR SALE.—The N. Y. Commercial Bulletin says: "The largest sale of city mills flour ever made in a single day's transactions was effected Oct. 14 by Hecker & Co., of the Croton and Metropolitan Mills, in the disposal of 80,000 sacks and 5,000 barrels, of which 20,000 sacks went to one European buyer in Portugal.

The above sale is remarkable, not alone for its volume, but as indicative of the growing strength of the Eastern mills, which now contest for the European trade, and, as never in the past, offer in proportion to their facilities formidable rivalry to the flour interests of the West. Our growing export trade in flour compensates for the decline in wheat exports, and the development of the foreign flour output is generally regarded on 'Change as the direct result of the Inter-State Commerce Law, under which the long haul shippers receive no discrimination favors, except under old contracts, and the New York market is given a chance to assert itself, as it is now doing.

OUR \$5.00 OFFER.

For \$5.00 we will send post-paid to any address in the United States or Canada, THE UNITED STATES MILLER (monthly), The Northwestern Miller, including Holiday number (weekly), The American Miller (monthly), The Milling World (weekly), and The New York World (weekly), with either one of the three books, "History of United States," "History of England" or "Everybody's Guide." These books are described fully in another column. Address orders to the publishers of this paper and they will be promptly attended to. Remit by Post-office Money Order, Registered letter or bank draft on New York or Chicago. Don't send local checks for our banks charge 25 cents each for collection.

DIED, Oct. 27, 1887, Carlos Ewell, of the well-known firm of Howes & Ewell, Silver Creek, N. Y., of bright's disease. Mr. Ewell was about 54 years of age at the time of his death. He was always esteemed as a skillful manufacturer and an honorable citizen. In noticing the demise of Mr. Ewell, the *Courier*, of Silver Creek, N. Y., says: "In the spring of 1866, he bought an interest in the firm of Howes, Babcock & Co., at Silver Creek, maintaining his connection therewith through the subsequent changes of Howes, Babcock & Ewell, and Howes & Ewell. In health, Mr. Ewell was noted for activity and unflagging industry, but since 1877 he had been more or less of an invalid, at times being compelled to abandon all active participation in the prosecution of business. This was notably the case from 1877 to 1883, when nervous prostration totally incapacitated him for business cares. From this, however, he rallied and again taking up his round of duties, the purchase of materials and supervision of the working departments of the great establishment of which he was part owner, he prosecuted them with much of his old time vigor, until, stricken with that dread malady, Bright's disease, his ability to care for his departments gradually waned, and one by one he relinquished his cares. Mr. Ewell was a man of much decision of character, exacting from those in his service implicit compliance with his instructions, yet possessing the happy faculty of retaining, in large measure, the respect and esteem of his employees. A man of untiring industry, he, seemingly, made social demands a matter of secondary importance, and spent his leisure time in the domestic circle. Successful in his business, his gains were largely expended in surrounding his family with such comforts and luxuries as would conduce to their happiness and

pleasure. In former years he had attained considerable prominence in local political circles. He leaves a wife, one married daughter, Mrs. Geo. W. Moore, of Leona, and a son and daughter, minors, to whom the sympathies of a wide circle of friends will be extended.

EGYPTIAN CORN.

A few weeks ago, we sent the following clipping taken from a Southern paper to the County Clerk of Sutter County, Cal.:

The planting of Egyptian corn is becoming quite an industry in some parts of California, and is being made very profitable by those who have undertaken it. On one ranch in Sutter County 1,000 acres are being put in.

In due course of time, we received the following reply from the Secretary of the Bureau of Immigration, the Hon. C. E. Williams.

MARYSVILLE, Cal, Sept. 1, 1887.

Editor United States Miller, Milwaukee, Wis.:

DEAR SIR: Yours of the 20th Aug. to the County Clerk, Sutter County, was referred to me. The cutting which you enclosed is quite true and the industry is assuming considerable importance, some 10,000 acres being planted this season. The greater part of it is grown on land summer-fallow for the next season's wheat crop. It thrives well on "upland" soil without irrigation, and is planted after the rains have all ceased, or at least at a time when we expect to get no more rain. The only trouble with the crop is in the gathering, as it gets ripe late in the season it is sometimes difficult to cure it properly. It yields well, if properly cultivated. I have never known of any being milled in any way. It sells for feed at about the same price as barley. It yields from 20 to 40 bushels an acre; weight 60 lbs. to the bushel.

I will send a sample of the grain to-day or to-morrow. Yours respectfully,

C. E. WILLIAMS, Sec.

ANOTHER MOVE BY THE MILLERS' NATIONAL ASSOCIATION.

The following correspondence clearly explains itself, and scarcely needs comment.

MILLER'S NATIONAL ASSOCIATION.

SECRETARY'S OFFICE,
Milwaukee, Wis., Sept. 16, 1816. }

To the Members of the Millers' National Association:

At a meeting of the sub-executive committee at the Grand Pacific Hotel, Chicago, Sept. 2, 1887, the following resolution was adopted:

Whereas, An official notice, dated May 5, 1883, published the fact that the Milwaukee Dust Collector Manufacturing Co., of Milwaukee, had made arrangements whereby they secured control of all patents that in any way conflicted with the right to manufacture the Prinz Dust Collector; and

Whereas, The Milwaukee Dust Collector Manufacturing Co. having closed out their dust collector business to the Geo. T. Smith Dust Collector Co., of Jackson, Mich., who will hereafter manufacture dust collectors, our members are hereby notified that the Geo. T. Smith Dust Collector Co., having succeeded to all the rights of the Milwaukee Dust Collector Manufacturing Co. in the manufacture of the aforesaid Prinz Dust Collector,

Resolved, That the notice of May 5th, 1883, be rescinded, and the secretary is hereby instructed to publicly notify members of the change mentioned above. Very truly,

S. H. SEAMANS, Secretary.

(Continued on page 88.)

FROM JONATHAN MILLS.

The United States Miller, Milwaukee, Wis.:

GENTLEMEN: In reading the report of the Pennsylvania Millers' State Association at Williamsport, Pa., on the 6th ultimo, I was much pleased with the report of the committee on patents. It is a well digested and a well written report. They, however, overlooked some matters that I think would have been well to have shown up in their report. There is as we all know several million dollars of a cash surplus in advance of costs of all nature now in the Treasury to the credit of the Patent Office, and in many departments a hearing cannot be heard on a claim in from six to nine months. The inventors and hard-working mechanics of this country have built up and supported this important branch of our government and justice demands that we should have more prompt returns than we are getting. Our Patent Commissioners for the past fifteen years have been greatly hampered by Congress withholding or rather not making appropriations large enough to meet the demands of the office. As I understand it, the Patent Commissioner must work his expenses within the appropriation: If our government had never fostered a patent system, it is hard to tell what kind of a country this would have been now. Stop the patent laws now and it would paralyze every branch of manufacture. It would at once stop almost every important manufacturing business in the country. If we will but stop to reflect on the benefits conferred on all classes of people, rich as well as the poor, by having our patent laws to protect and stimulate their various manufacturing enterprises and reflect and take into account the millions of devices patented that are used to make mankind the happier and greater, we stand aghast with our every sense of pride quickened at our wonderful ingenuity and fairly shudder to reflect what the consequences would be should our government conclude to abandon our patent system. Reflect on even the consequences of the small conveniences we have in daily use that we could not have expected to have if our inventors had not the patent laws to stimulate them and insure protection to capital and time employed to invent them. Take for instance the paper this is printed on, the type, the ink, the press, the pen or pencil that writes this article, the inkstand that holds the ink, the desk it is written on, if not all patented they are made by machinery that is patented, and who would have spent their time and racked their brain to perfect machinery to even make our common lead pencil if they were not sure of some kind of protection from our government? Take the common lead pencil from the people of the world to-day and it would throw our whole mercantile and manufacturing business in a perfect chaos. A supposition even could not be maintained for one minute that we would now be enjoying five per cent. of the many every day conveniences that we are enjoying if it was not for the protection of the patent laws of the different countries. I am not too sure but what we would still be using the old wooden plow or something in its place not much better.

Our Congressmen should take a greater interest in our patent laws, or at all events not hamper the Patent Department by with-

holding ample appropriations. The manufacturers, mechanics, merchants, farmers and men of every class that are entitled to a vote should not vote for any man for Congress that will not pledge himself to use his influence and vote to further every interest of our patent laws. They are fairly good as they now stand if they were not hampered by Congress.

I believe that there is more money invested to-day in patented articles and the manufacture of patented machinery than is used in every other branch of industry, not including the agricultural interests. Without the patented machinery used for agricultural purposes and to manufacture and transport the products of our soil, we would now be in about the same condition that India, Spain, Mexico and some other benighted countries are in to-day. What condition would our great country be in to-day without our patent-railroads and steamboats? I say patented in a broad sense for the reason that almost every part of a railroad is patented from the hand car on up through all and every grade of car up to the locomotive, the rails, the fish joints, the car wheels, the boxes, the brake, on through almost every part of the equipment from the signal light to the steam whistle, and to-day this great railroad interest is encouraging every inventor and invention that shows true merit. The inventor that should invent an indestructible railroad tie would receive untold wealth and the blessings and homage of the civilized world. What kind of heathens would we be without the railroad? Our President could not ride in a veritable palace from Washington to St. Louis in the short space of 30 hours and meet hundreds of thousands of intelligent people on the route. He could not notify the people in the great cities he is to visit that he would arrive in their midst on a certain day, hour and minute. Without the protection of our patent laws I venture to say we would lapse into a half-civilized nation.

In fact, I think we would soon lose all interest in upholding our country; our people would drift into tribal colonies. Without the protection of our patent laws we would never have had the telegraph to flash the busy doings of a day to and from all parts of the world, so that every man, woman and child that can read can learn all that is going on in the world almost every hour of the day.

In fact, the benefits of our patent system are so vast, that no man or set of men can begin to enumerate their number or blessings.

I am of the opinion that the time is at hand now that Congress should appoint an independent Board of at least five Commissioners to be paid out of the surplus money accumulated by the Patent Office. The duties of these Commissioners should be to adjust infringing cases and should in no way conflict with the duties of our present officers. They should have similar powers to our Interstate Commerce Commissioners. They should receive salaries large enough to command the very best talent fitted to the requirements. At least two of them should be attorneys thoroughly posted on patent and general law. The other three should be thorough mechanical experts with acknowledged ability that would command salaries of eight or ten thousand dollars a year as mechanical engineers from any large corporation requiring such

ability. They should be located at Washington and serve the year round, and should hold the position for life or as long as their integrity was not impeached.

Then if Roe believed Doe was infringing his rights Mr. Roe could notify the Board of Commissioners and they in turn could set a time that both parties could be heard, and the Commissioners should decide the matter right there and then and put an injunction on Mr. Doe if he was infringing, and if Mr. Doe concluded he had not received justice, let him appeal the evidence just as it had been presented to the Commissioners without any further testimony, to the Supreme Court for final decision, but he must stand enjoined until the court rendered a decision, and if then the court should decide to raise the injunction and let Mr. Doe go ahead with his patents, his patents should be extended to cover as much time as he had been stopped by the injunction, and Mr. Roe should pay all costs. The Commissioners should have the power of deciding the amount of damages in the shape of royalties that the infringing party should pay.

Then if the infringing manufacturer should not be able to pay the amount, the rightful patentee should have the right to collect of the user of the infringing machine not to exceed 20 per cent. of the selling price of said machine and not be compelled to pay anything out of the profits he might have gained by the use of such invention, except in process patents and they should be settled for on a basis fixed by the Commissioners at the time of giving their decision on the invalidity of the infringing machine or process, or within at least six months after their infringing decision. They should have the time and power to learn through the users of the infringing machine or process and through those using the genuine machines or process what would be a fair royalty for the infringer to pay, and I think it might be proper for the Commissioners to appoint a receiver to collect the royalties and pay the money over to the rightful patentee, with a full and complete statement of every transaction.

Some such arrangement as I have crudely blocked out should be made by our very next Congress, and I hope all the papers and every person interested will persistently urge this matter. I believe it is to every commercial as well as individual interest to use every possible influence for bringing about the appointing of such a Commission and to insist on more ample appropriations being made to allow the Patent Commissioner to keep up with his work in every department and hold him to account if he fails to do his duty, all of which I most humbly submit to the favorable consideration of all who have interest in the welfare, progress and development of our vast national resources.

JONATHAN MILLS.

CLEVELAND, O., Oct. 1887.

WATCH-SPRINGS are tempered by electricity by the Sedgwick Manufacturing Co., 21 S. Canal street, Chicago.

JAMES JAMES, a negro, residing at Santa Rosa, Mexico, is believed to be the oldest man living. He was born in 1752 and is now 135 years old. He ran a corn mill in Georgia for a number of years.

NEWS

BURNED—Perkins & Degarmo's mill at Sunset, Tex.

BURNED at Snookville, N. C. Plaster C Lipe's mill. Loss \$7,000.

BURNED—J. W. GIVIDEN's mill at Sulphur, Ky., loss \$7,000.

McBRIDE & WAITS succeed Wm. McBride at Strath, Ont.

T. WARTHEN & Co.'s grist mill at Warthen, Ga., burned recently.

ASSIGNED—Charles Koenig, Watertown, Wis.—Sold out, S. Carson, Galesburg, Mich.

BURNED, Oct. 23, Ellis & Co.'s flour mill at Hopkinsville, Ky. Loss \$40,000. Insurance \$30,000.

BURNED—Gary & Jones' mill in Portage, Wis., burned Oct. 28. Loss \$5,000. Insurance \$1,000.

DIED—Oct. 13, aged 67, Geo. Urban, Sr., one of the oldest and most prominent millers in Buffalo, N. Y.

BURNED—M. L. Luke's mill at Nanticoke, Pa.—A. W. Miln & Co., Champeog, Oreg., has sold his mill.

At Columbus, Miss., Oct. 24, Dr. Hutchinson's steam gin and grist mill were destroyed by fire. Loss about \$15,000.

Near Medford, N. J., Oct. 20, the flouring mill at Snyder's Mill, belonging to J. Bowker, was entirely destroyed by fire, causing a loss of \$6,000, partly covered by insurance.

The new town of Walker, Ellis County, Kans., on the U. P. R. R., 275 miles west of Kansas City, is said to be growing rapidly. A good flour mill is wanted there and the citizens are willing to aid such an enterprise.

At St. Paul, Minn., Oct. 23, at 3 A. M., the flouring mill belonging to Sylvester & Peddicord, in the south part of the city, was destroyed by fire. Insured for \$2,000. The fire is supposed to have originated in the furnace of the mill.

J. K. BARTON has bought the "Union Mill" at Trimble, Wis.—J. T. Walker & Son are building a mill at Mt. Airy, Philadelphia, Pa.—B. B. Atkinson is remodeling his mill at Columbus, N. J., to a 50-bbl. roller mill, steam power.

At Mooresville, Ind., Oct. 19, D. W. Overton's large new elevator was burned to the ground. It contained 12,000 bushels of wheat, 4,000 of oats, 2,000 of corn, and \$1,000 worth of clover seed. The entire loss is estimated at \$20,000; only partly insured.

BURNED—Oct. 4, G. H. Vincent's 50-bbl. water-power mill, near Waukesha, Wis. Loss \$6,000. Insured in Millers' National of Chicago for \$4,500. Fire thought to be incendiary. Mr. Vincent was just returning from Waukesha when he discovered the mill to be on fire.

The new elevators of the Duluth Elevator Co., on the West Superior side of the bay, are nearly completed. No. 3 is ready for and receiving wheat, and Nos. 1 and 2 will be ready by November 1. These elevators will have a combined capacity of 5,000,000 bushels and will make the total capacity there about 10,300,000 bushels.

HUDSON & THRAILKILL, Milford, Tex., will soon build a 75-bbl. roller mill.—Bedford & Smith, Anderson, Cal., will build an \$8,000 roller mill.—G. Most & Sons are building a 100-bbl. roller mill at East Dubuque, Ill.—The Farmers' Roller Mill Co., Trenton, Tex., has been incorporated with a capital stock of \$30,000.

ANDREW PETERSON has bought the mill at Rushville, Wis.—Wm. D. Shorno, Reading, Pa., is exchanging to the roller system.—J. M. Taylor's 100-bbl. water-power roller mill at Slate Mills, Va., has just started up.—S. G. Brubaker & Co., Camden, O., are building a 50-bbl. roller mill.—James Bibby & Bros. are just starting up their mill at Charleston, W. Va.—J. J. Robbins is building a feed mill and elevator at at Scranton, Pa., to be run by electricity.

A 100-bbl. roller mill is being built for Gardner & Co., at Russellville, Ind.—Rogers & Bastian are about to build a mill at Carlisle, Ky.—Ritzer Bros. have leased Manegold's mill at Hartland, Wis.—Howes & Swell's grain cleaning machinery was recently awarded a "Diploma of Merit" with "Highest Honors" at the International Millers' and Bakers' Exposition in Milan, Italy.—W. A. Coombs

now owns both of the mills at Coldwater, Mich., having bought out Johnson & Starr & Kerr Bros.

The Baltimore, Md., Journal of Commerce of Oct. 22 says: "We are pleased to learn that the extensive flouring mill and elevator of the C. A. Gambrill Manufacturing Co., on Smith's wharf, in this city, which were so seriously damaged by fire last summer, have been thoroughly refitted, and that, with improved machinery and appliances, they will resume operation; on Monday of the coming week. The elevator has been busy getting in wheat this week and the bins are well filled. We congratulate the energetic management upon their success."

MILLS AND ELEVATORS BURNED RECENTLY.—L. Luziere's mill and elevator at Manteno, Ill. Loss \$50,000. Ins. \$12,000.—Robert & Jones' mill at Neosho Rapids, Kas. Loss \$12,000. Ins. \$5,000.—Golden Gate Mills, Denver, Colo., Loss \$45,000. Ins. \$12,000.—Horner & Slocum, Medaryville, Ind. Loss \$7,500. No ins.—J. W. Richardson's elevator, Greenwich, O. Loss \$15,000. Ins. \$7,000.—Cullen & Feaga's mill near Frederick, Md. Loss \$4,000. Ins. \$2,500.—Tyrell Mill Co.'s mill at Tyrell Hill, O. Loss \$15,000. Ins. \$4,000.—W. M. Galt & Co.'s mill, Washington, D. C. Loss \$21,500.—Marshall Bros.' mill, Inlay City, Mich. Loss \$6,500.—F. D. Tower's mill, Albany, N. Y. Loss \$35,000. Ins. \$15,000. S. McAllister's grist mill, East Brimfield, Mass. Loss \$3,500.—Aug. 19, The Eagle Mill in Memphis, Tenn., burned. Loss \$30,000. Ins. \$15,000.—C. B. Palmer's mill at Dayton, O. Loss \$17,000. Ins. \$13,000. Loss on stock not included.—Walter Holden's mill and a quantity of grain in Chester County, Pa., burned Aug. 6.—An explosion and fire in the malt grinding mill of the Bergdoll Brewing Co., Philadelphia, Pa., caused damage to the amount of \$100,000. Cause unknown.

ROWAN & SONS' mill at Shawneetown, Ill., is being remodeled to a 150-bbl. roller mill.—Geo. G. Dutton is building a 60-bbl. roller mill at Chester, Pa.—The contract has been let for the rebuilding the St. Anthony elevator, Minneapolis, to J. A. McLennan, of Chicago, who recently built the Great Northern Elevator at West Superior, Wis.—A boiler in the mill owned by the Geo. Plant Mill Co.'s mill in St. Louis, Mo., exploded Oct. 3, killing four persons and injuring several others.—N. Webber & Son are building a 50-bbl. roller mill at Eldorado, Ill.—Jas. E. A. Gibbs is building a corn mill and elevator at Rapshire, Va.—W. R. Freeman, of Chesapeake City, Md., is remodeling his mill to the roller system.—Three heavy failures of grain and flour brokers in Boston and one in New York are announced. Minneapolis, Rochester and Niagara Falls millers are losers to a considerable extent.—Burned—Douglas & Stuart's "Star" oat meal mill.—Large quantities of flour have recently been shipped from Portland, Oreg., to Great Britain.

McCLURE BROS., at Bethany, Mo., have adopted the roller system. and W. C. Keith, of Goldfield, Ia., is about to do the same.—J. H. Little, Yellow Springs, O., are building a corn meal mill.—Watson & Fullington, Greensburg, Kans., will soon begin the erection of a full roller mill.—C. Asmuth's mill (feed) at Brandon, Wis., has burned, together with 5,000 bushels of grain and an adjoining grain elevator. Loss heavy.—Hatch & Talbot, millers, Rockland, Tex., have dissolved.—Burned—G. H. Vincent's mill, Waukesha, Wis.—Assigned—Dunlop & McClance, Richmond, Va.—Burned—Roundtree & Holcomb's mill at Broadhead, Wis.—It is reported that V. Stoskopf has sold his mill at Freeport, Ill.—Sold out—W. F. Allen, Ashland, Neb.—An unusually large number of millers have been obtaining loans within the last 60 days. It takes cash to buy wheat and many think that the present is a good time to buy.—Dissolved—Rush & Co., White City, Kans.—Dissolved—Carmer & Parmalee, North Lansing, Mich.—Work has been commenced on a 100,000 bushel elevator in Minneapolis.—Died—Sept. 27, at Aberdeen, Dak., W. H. Mass, a well-known Minnesota miller.

T. M. C. LOGAN is building an elevator at Eleven, Ia.—J. N. Ready, of Lewisville, Tex., desires to correspond with some miller with a view to the building of a flour mill at that place.—\$1,500 bonus for a flour mill at Grass Lake, Mich.—Incorporated—The Omaha Mill & Elevator Co., Omaha, Neb.; capital \$100,000.—S. M. Jennison & Son are building a mill at Talladega, Ala.—Beckley & Phipps, Paynesville Minn., now use steam instead of water

power.—J. P. Moore is building a mill on the site of his old one, which was destroyed by floods not long since, and Jacob Parker & Sons are doing likewise at Parker's Store, Ga.—B. Whitfield has finished his grist mill at Jefferson, Ala.—A 75-bbl. mill will be built at Filley, Neb., for J. R. Vorhees.—Milling seems to be in a very unsettled condition at present in California. It is thought, however, that the business will be steady and good in a month or so.—A stock company with \$30,000 capital has been organized at Anniston, Ala., to erect a 100-bbl. flour mill.—Bachman & Co.'s mill at Clover Bottom, Tenn., is nearing completion.—Freeman's 1,000-bbl. mill at La Crosse, Wis., has recently been extensively improved.—C. W. Bonniwell is about to build a 100-bbl. mill at Howard Lake, Minn.

PUBLICATIONS RECEIVED.

MR. TURNER, of the Link Belt Machinery Co. of Chicago, Ill., has furnished us with a handsome copy of the company's new catalogue. It contains 178 pages of handsomely illustrated letter press and is well bound. It graphically shows the numerous uses to which the link belting may be applied. Mill and elevator owners can secure copies by writing to the company.

We acknowledge the receipt of the Fourth Annual Report of the Agricultural Experimental Station of the University of Wisconsin at Madison. This report is an especially valuable one and the article on "Feeding for Fat and Lean" is worthy of the careful attention of all interested in stock raising.

THE CHOICE OF A BOILER.

Buying a boiler which figures up largely in "heating surface" is one thing, and getting good evaporative results from this "surface" is quite another thing. It was supposed by many persons some years back (and is supposed yet by some few,) that the more tubes you could crowd into a steam boiler the better "steamer" it would be; but time and some bitter experience have proved to manufacturers that free circulation of water in the boiler is much more important. It has been proved time and again, says the *Millstone*, to the satisfaction of everyone (except coal dealers) that boilers having from six to ten tubes less than others, with a good open space in the center of the cluster of tubes of about 3½ inches, and the same space between the tubes and the shell of the boiler, evaporated more water per lb. of coal, besides giving good room for cleaning and a freedom from expensive repairs. The writer came across a case some years ago that will serve as an illustration. A prominent mill owner had in his boiler house a strong, well-built, 54-inch boiler of the tubular type, with 49 3½-inch tubes, the boiler being 16 feet long. Draught to furnace good; setting of brick work under boiler very good. After one year's use the boiler did not steam well, no matter how much fuel was burned, sheets directly over fire grates had to be replaced twice on account of bulging down and cracking rivet holes. A good-sized man-hole was in front end under the tubes, and the boiler bottom was kept clean; good mud receiver at rear end, but the tubes were not not over three-quarters of an inch apart, and would be easily clogged to prevent steam bubbles from rising up to the water-line if the water should happen to be a little dirty. A finer grade of coal was used, still it wouldn't do. A row of tubes in the center was taken out, reducing the horse-power as per figures about 4½; slack coal was used thereafter, and less of it than ever before, to do the same work. The old tubes were stopped up with "dummies."—*Mechanical World*.

MILLERS' NATIONAL ASSOCIATION.

SECRETARY'S OFFICE,
Milwaukee, Wis., Sept. 16th, 1887.

Having received letters from prominent members referring to the fact that dust collectors similar to the one made by the Knickerbocker Co., and called by it the "Cyclone," are offered for sale; and inquiring into the possibility of trouble and litigation arising therefrom, communication was opened with the Knickerbocker Co., the result of which was an interview at Milwaukee between the chairman and secretary of the sub-executive committee, and members of the Knickerbocker Co., at which interview the status of the applications in the patent office in the interest of the Knickerbocker Co., was fully explained. But inasmuch as a call had been issued for a meeting of the sub-executive committee at an early date no action was taken, and the Knickerbocker Co. was requested to present their case in writing at that meeting in order that the committee might take such action as they deemed best for the interest of the association. The meeting was held in Chicago, Friday Sept. 2, when the following letter was presented by the Knickerbocker Co.:

JACKSON, MICH., August 18, 1887.

C. H. Seybt, F. L. Greenleaf, J. A. Hinds, Alex.
H. Smith, S. H. Seamans, sub-executive com-
mittee Millers' National Association:

GENTLEMEN: With this we give you a statement of the history of the Morse Cyclone dust collector to the present date. Our object in writing this is that you may, if you see fit to do so, inform the members of your association of the situation, and having thus put them on their guard, probably prevent them from incurring future trouble and expense, which is almost certain to occur if they buy similar machines from any one but ourselves. As evidence of good faith, and to furnish the milling public with an assurance that they will be protected in the use of the machine bought from us against all other claimants, we tender for your acceptance the enclosed bond, which we will execute upon your expressing your willingness to inform your members and the public that such a bond has been delivered to you. At the same time we wish to give fair notice, that we shall in due time protect our property and our rights against unauthorized manufacturers or those who purchase or use any machines of that character not manufactured by us.

Very truly yours, THE KNICKERBOCKER CO.,
Per R. H. EMERSON, Treas.

After hearing a full detailed statement by a representative of the Knickerbocker Co., regarding the status of their claims, your committee adopted the following resolutions, offered by F. L. Greenleaf:

Resolved, That the proposition offered by the Knickerbocker Co., of Jackson, Mich., to furnish a bond with good and sufficient sureties in the sum of fifty thousand dollars (\$50,000) to protect the members of the Millers' National Association in the purchase and use of the Cyclone dust collector, be accepted.

Resolved, That when the necessary bond is properly executed and delivered, the secretary publicly notify our members that such a bond has been provided for their protection in the purchase and use of said Cyclone dust collector, and that this association will not assume the defense of any purchaser of a similar dust collector conflicting with the patent claims of the Knickerbocker Co., but each individual buyer must look to the seller for his indemnity and protection.

The bond named in the foregoing resolutions, properly executed, is now on file with the secretary, and this notice is published by direction of the sub-executive committee, Millers' National Association, in accordance with said resolution. Very truly,

S. H. SEAMANS,

Secretary. Address, H. P. YALE & CO., Milwaukee, Wis.

FROM H. A. HUEFFNER.

[CORRESPONDENCE.]

Editor United States Miller:

Your favor of the 20th inst. came to hand, and in answer I will say the following: The opponents of the short system have, since the very time that the latter commenced to be heard of, spread the report that the product of the short system mills was deficient in strength. Perhaps they felt that they could not uphold their claims about low grade, small yield, and so on for a long time, and thought it a good plan to run down the strength of the flour. At all events I do not know on what authority they based their claims. Of course, running a short-system mill myself, I was deeply interested in the truth, and so at the first opportunity I sent samples of my flour to Saint Louis for inspection. As a definite proof a competitive test was made against one of the St. Louis mill, and the percentages of our out-put compared as follows:

Mine (Short System.)	St. Louis Mills (Long System.)
Patent, 70 per cent.	Patent, 25 per cent.
Baker's, 26 " "	Baker's, 68 " "
Low Grade, 4 " "	Low Grade, 13 " "

It will be seen from these figures, that in point of yields I was far ahead of the St. Louis mill, against whose samples I was to compete as to quality. The test was conducted under the supervision of the flour inspector and flour merchants of St. Louis, and two bakers of the same city. As to strength and baking qualities the samples from my mill and those from the St. Louis mill were pronounced without any marked difference, and if any, it was in favor of mine. Both bakers failed to detect any difference in the flour from both mills. The kind of wheat used in both mills was the same. I will also mention that the St. Louis mill claims to use 4 bushels, while I use 4 bushels and 26 pounds, which will settle the question of yields. Of course it must be understood that I do not claim such results could be gained by simply shortening any kind of long system. It is a system for itself which must be carefully followed out, from perfectly cleaned wheat to begin on, and through the proper grinding and scalping, &c. Hoping that many millers who may read this, and that are prejudiced against the short system, may duly consider the competitive test made as to percentages, yields, strength and baking qualities between the two systems.

I am very truly yours, H. A. HUEFFNER.
Palmer, Ills., Oct. 25, '87.

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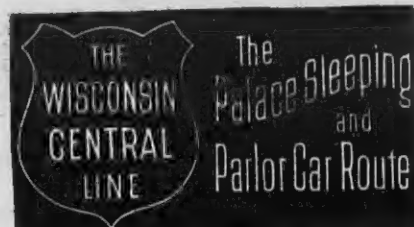
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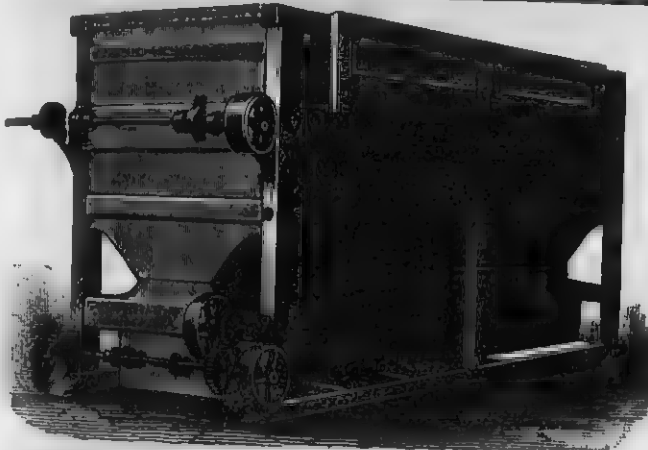
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[See other side of this page.]

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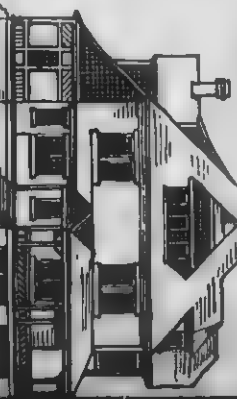
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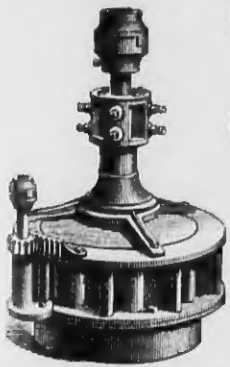
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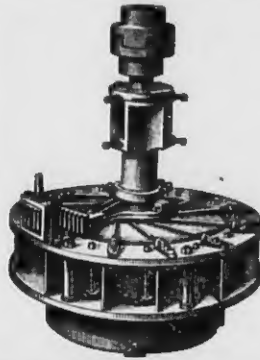
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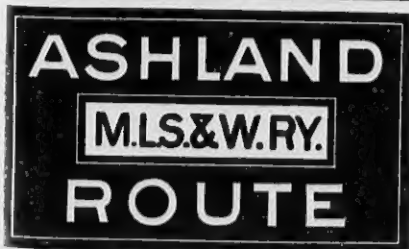
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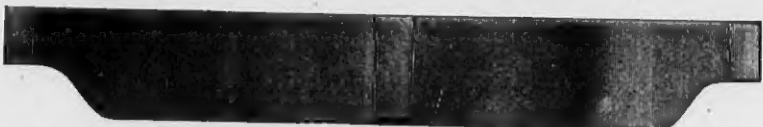
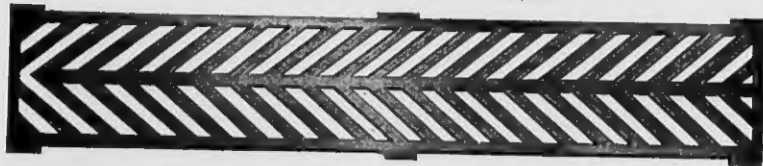
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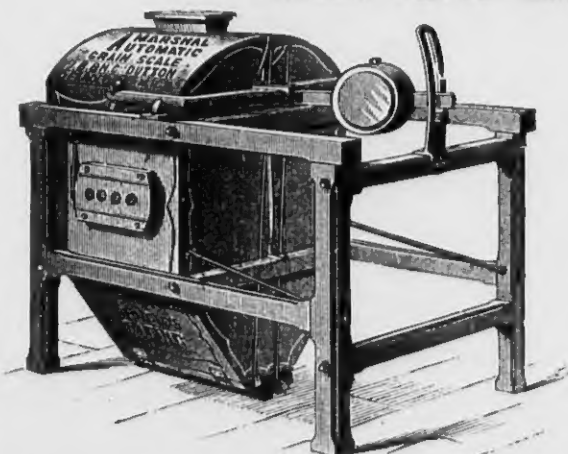
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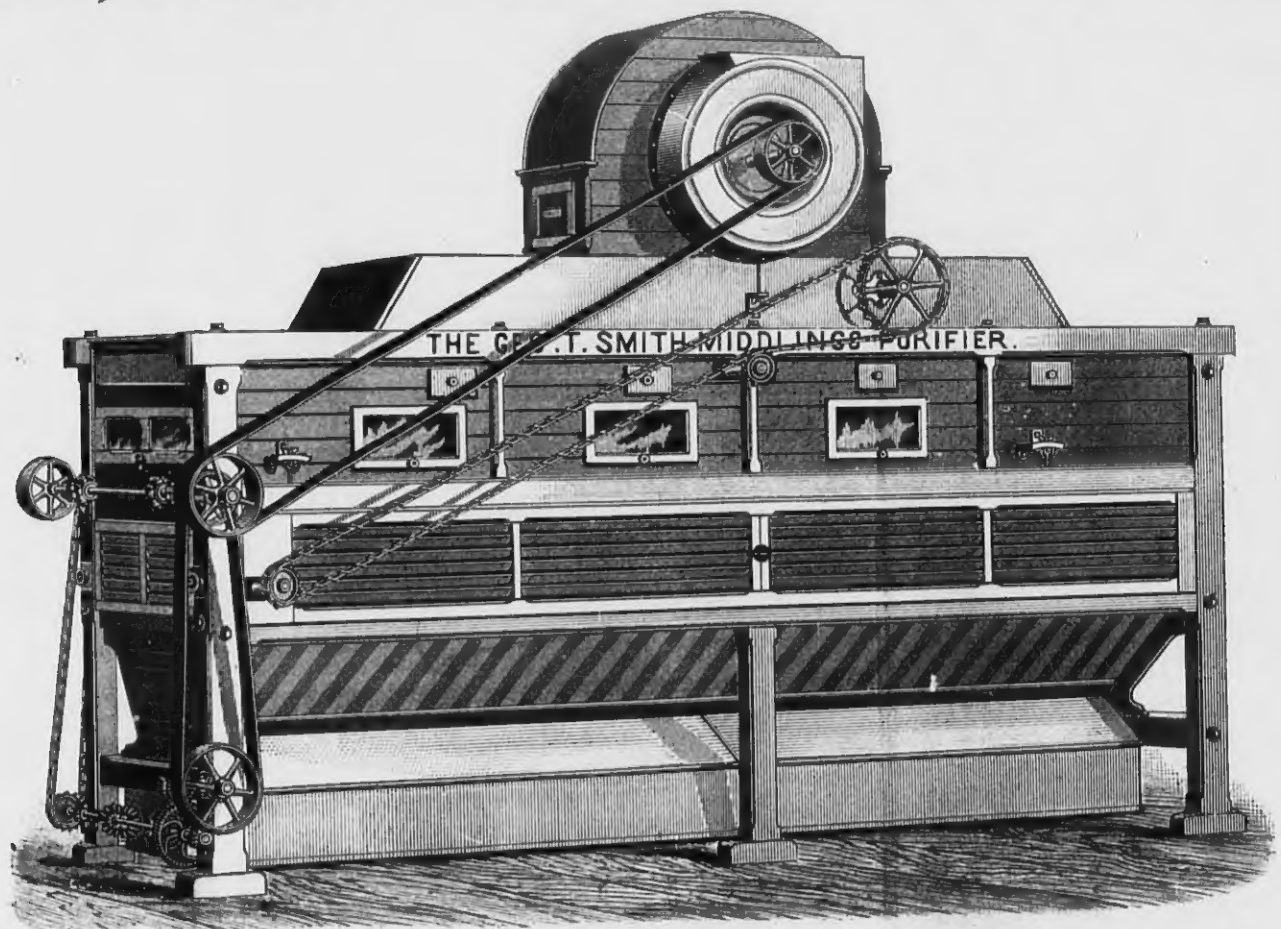
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THE UNITED STATES MILLER.

\$80,000 Patent Decision.



The United States Circuit Court, for the Eastern District of Wisconsin, Judges Gresham and Dyer, have rendered a decision in favor of The Geo T. Smith Middlings Purifier Company in the suit of that Company and others against the Milwaukee Dust Collector Manufacturing Company.

The decision awards the Complainants upwards of eighty-thousand dollars damages and enjoins the Milwaukee Company from the further manufacture or sale of the Dust Collectors.

We have the exclusive right of Manufacturing Dust Collectors under upwards of twenty patents (all the patents in question, including the patent of Faustin Prinz).

For further information in regard to our control of the manufacture of Dust Collectors, we refer to our Attorneys in the litigation, Messrs. Flanders & Bottum, of Milwaukee, Wis.

We have improved the Dust Collector and fitted it for attachment to our Purifiers; when sold in connection with Purifiers, no extra charge is made for attachment.

**Geo. T. Smith Middlings Purifier Co ,
JACKSON, MICHIGAN.**